

### Claims

- 5 1. A barrier coating composition characterized in that it comprises a polymeric material and at least one inorganic flake material.
2. A barrier coating composition as claimed in claim 1, characterized in that the polymeric material is present in an amount of 50 to 99 % by weight.
- 10 3. A barrier coating composition as claimed in claim 1 or 2, characterized in that the inorganic flake material is present in an amount of 1 to 50 % by weight.
- 15 4. A barrier coating composition as claimed in at least one of the preceding claims, characterized in that the particle thickness of the inorganic flake material is preferably less than 1.0  $\mu\text{m}$ .
- 20 5. A barrier coating composition as claimed in at least one of the preceding claims, characterized in that the average particle size of the inorganic flake material is in the range of 1 to 1000  $\mu\text{m}$ .
- 25 6. A barrier coating composition as claimed in at least one of the preceding claims, characterized in that the inorganic flake material are glass flakes.
- 30 7. The use of a barrier coating composition as claimed in at least one of the preceding claims in a barrier coating layer of Organic Field effect transistors, Liquid crystal displays, OLED displays, flexible displays, displays of TV screens, photovoltaic cells and lithium batteries.
- 35 8. A device comprising at least one barrier coating layer, characterized in that the at least one barrier coating layer comprises a barrier coating composition as claimed in at least one of claims 1 to 6.

9. A display comprising at least one barrier coating layer, characterized in that the at least one barrier coating layer comprises a barrier coating composition as claimed in at least one of claims 1 to 6.

- 5 10. A barrier coating formulation comprising  
a) a polymeric material and/or a polymerizable material,  
b) at least one inorganic flake material and  
c) at least one organic solvent.

10

15

20

25

30

35